

LaJuana S. Wilcher
Secretary

AIR QUALITY PERMIT
Issued under 401 KAR 52:040
STATE ORIGIN

Ernie Fletcher
Governor



Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

Permittee Name: Red River Hardwood, Inc
Mailing Address: P.O.Box 696, Clay City, KY 40312

is authorized to construct and operate a wood milling facility

Source Name: Red River Hardwood, Inc
Mailing Address: Same as above
Source Location: 588 Lofty Heights, Clay City, KY 40312
KYEIS ID #: 21-197-00012
Log Number: 56203
AI Number: 3795

SIC Code: 2426
County: Powell

Permit Number: S-04-007
Permit Type: Minor Source, Operating

Regional Office: Frankfort Regional Office
643 Teton Trail Suite B
Frankfort, KY 40601
(502) 564-3358

Completion Date: February 5, 2004
Issuance Date: February 17, 2004
Expiration Date: February 17, 2014

John S. Lyons, Director
Division for Air Quality

State-Origin Construction/Operating

Red River Hardwoods Inc

Subject Item Inventory

Activity ID No.: APE20040001

Subject Item Inventory:

ID	Designation	Description
AIOO3795		
COMB1	001	Wood Waste Boiler w/ 13.4 mmBTU/hr- Control Equipment: Bag House
EQPT1	002	Mill working Equipment 14.3 tn/hr Control Equipment: Bag House
EQPT2	003	Chipper 6.42 tn/hr Control Equipment: Bag House
EQPT3	004	Trailer 4.82 tn/hr Control Equipment: Bag House
EQPT4	005	Gluing Process 2000 gal/hr

KEY

ACTV = Activity

AREA = Area

EQPT = Equipment

PERS = Personnel

STOR = Storage

TRMT = Treatment

AIOO = Agency Interest

COMB = Combustion

MNPT = Monitoring Point

PORT = Transport

STRC = Structure

State-Origin Construction/Operating

Red River Hardwoods Inc

Facility Requirements

Activity ID No.: APE20040001

Page 1 of 13

Submittal/Action Requirements:

Condition

No.

Condition

S-1

SEMIANNUAL REPORTS:

The permittee shall submit report(s): Due semiannually, by the 30th of January and July to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit. This report shall be a summary of any monitoring required by this permit, other than continuous emission or opacity monitors. For emission units that had not yet begun construction, were still under construction, or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation. All reports shall be certified by a responsible official. All deviations from permit requirements shall be clearly identified in the reports. [401 KAR 52:040 Section 21]

State-Origin Construction/Operating

Red River Hardwoods Inc

Facility Requirements

Activity ID No.: APE20040001

Page 2 of 13

Submittal/Action Requirements:

Condition No.	Condition
S-2	<p>COMPLIANCE CERTIFICATION:</p> <p>The permittee shall certify compliance with the terms and conditions contained in this permit and shall submit compliance certification: Due annually, by the 30th of January to the Regional Office listed on the front of this permit. Compliance Certification Form (DEP 7007CC) (or an approved alternative) shall be used in accordance with the following requirements:</p> <ol style="list-style-type: none">Identification of the term or condition;Compliance status of each term or condition of the permit;Whether compliance was continuous or intermittent;The method used for determining the compliance status for the source, currently and over the reporting period, andFor emission units that had not yet begun construction, were still under construction, or which had not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is not in operation and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the Regional Office listed on the front of this permit and the following address: <p>Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601. [401 KAR 52:040 Section 19]</p>
S-3	<p>PERMIT EXPIRATION AND REAPPLICATION REQUIREMENTS:</p> <p>This permit shall remain in effect for a fixed term of ten (10) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division. The permittee shall submit permit application for renewal: Due 180 calendar days before permit expiration date to the Division. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:040 Section 15]</p>

State-Origin Construction/Operating

Red River Hardwoods Inc
Facility Requirements

Activity ID No.: APE20040001

Page 3 of 13

Narrative Requirements:

Condition No.	Condition
T-1	SECTION A. PERMIT AUTHORIZATION. [401 KAR 52:040]
T-2	<p>A1. Pursuant to a duly submitted application, the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.</p> <p>The permittee shall not construct, reconstruct, or modify an affected facility without first having submitted a complete application and received a permit for the planned activity from the Division, except as provided in this permit or in 401 KAR 52:040, State-origin permits.</p> <p>Issuance of this permit does not relieve the permittee from the responsibility of obtaining other permits, licenses, or approvals that may be required by the Cabinet or other federal, state, or local agencies. [401 KAR 52:040]</p>
T-3	SECTION B. ADMINISTRATIVE REQUIREMENTS. [401 KAR 52:040]
T-4	B1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:040, Section 3(1)(b) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit. [401 KAR 52:040 Section 3(1)(b)]
T-5	B2. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [Cabinet Provisions and Procedures for Issuing State Origin Permits, Section 1a (11)]. [401 KAR 52:040 Section 23]
T-6	B3. This permit may be revised, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance shall not stay any permit condition. [Cabinet Provisions and Procedures for Issuing State Origin Permits, Section 1a (4) and (5)]. [401 KAR 52:040 Section 23]
T-7	B4. This permit does not convey property rights or exclusive privileges. [Cabinet Provisions and Procedures for Issuing State Origin Permits, Section 1a, 8]. [401 KAR 52:040 Section 23]
T-8	B5. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 52:040 Section 11(3)]
T-9	B6. This permit shall be subject to suspension at any time the permittee fails to pay all fees within 90 days after notification as specified in 401 KAR 50:038 Section 3(6)(b), Air emissions fee. The permittee shall submit an annual emissions certification. [401 KAR 52:040 Section 20]
T-10	B7. All previously issued construction and operating permits are hereby null and void. [401 KAR Chapter 52]

State-Origin Construction/Operating

Red River Hardwoods Inc

Facility Requirements

Activity ID No.: APE20040001

Page 4 of 13

Narrative Requirements:

Condition No.	Condition
T-11	SECTION C. RECORD KEEPING REQUIREMENTS. [401 KAR 52:040]
T-12	C1. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of at least five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [Cabinet Provisions and Procedures for Issuing State Origin Permits, Sections 1b (IV)(2) and 1a (7)]. [401 KAR 52:040 Section 23]
T-13	C2. The permittee shall perform compliance certification and recordkeeping sufficient to assure compliance with the terms and conditions of the permit. Documents, including reports, shall be certified by a responsible official. [401 KAR 52:040 Section 21]
T-14	SECTION D. REPORTING REQUIREMENTS. [401 KAR 52:040]
T-15	D1. a. The permittee shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows i. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown. ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request. b. The permittee shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Reporting Requirement condition D1.a above), the probable cause of the deviation, and corrective or preventive measures taken; to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report. [Cabinet Provisions and Procedures for Issuing State Origin Permits, Section 1b, V(3)]. [401 KAR 50:055 Section 1]
T-16	D2. The permittee shall furnish information requested by the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the permit. [Cabinet Provisions and Procedures for Issuing State Origin Permits, Section 1a, 6]. [401 KAR 52:040 Section 23]
T-17	SECTION E. INSPECTIONS. [401 KAR 52:040]

State-Origin Construction/Operating

Red River Hardwoods Inc

Facility Requirements

Activity ID No.: APE20040001

Page 5 of 13

Narrative Requirements:

Condition No.	Condition
T-18	<p>E1. The permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:</p> <ul style="list-style-type: none">a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;b. To access and copy any records required by the permit;c. Inspect any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit.d. Sample or monitor substances or parameters to assure compliance with the permit or any applicable requirements. <p>Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency. [401 KAR 52:040 Section 3(1)(f)]</p>
T-19	<p>SECTION F. EMERGENCIES/ENFORCEMENT PROVISIONS. [401 KAR 52:040]</p>
T-20	<p>F1. The permittee shall not use as defense in an enforcement action, the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Cabinet Provisions and Procedures for Issuing State Origin Permits, Section 1a, 3]. [401 KAR 52:040 Section 23]</p>
T-21	<p>F2. An emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:</p> <ul style="list-style-type: none">a. An emergency occurred and the permittee can identify the cause of the emergency;b. The permitted facility was at the time being properly operated;c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; andd. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency and included a description of the emergency, steps taken to mitigate emissions, and corrective actions taken. <p>These provisions are in addition to any emergency or upset provision contained in an applicable requirement. [401 KAR 52:040 Section 22(1)]</p>
T-22	<p>F3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:040 Section 22(2)]</p>
T-23	<p>SECTION G. COMPLIANCE. [401 KAR 52:040]</p>

State-Origin Construction/Operating

Red River Hardwoods Inc

Facility Requirements

Activity ID No.: APE20040001

Page 6 of 13

Narrative Requirements:

Condition No.	Condition
T-24	<p>G1. Periodic testing or instrumental or non-instrumental monitoring, which may consist of record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstration of continuing compliance with the conditions of this permit. For the purpose of demonstration of continuing compliance, the following guidelines shall be followed:</p> <ul style="list-style-type: none">a. Pursuant to 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation at any time an affected facility for which the equipment and measures are designed is operated, except as provided by 401 KAR 50:055, Section 1.b. All the air pollution control systems shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers. A log shall be kept of all routine and non routine maintenance performed on each control device.c. A log of the monthly raw material consumption and/or monthly production rates shall be kept available at the facility. Compliance with the emission limits may be demonstrated by computer program, spread sheets, calculations or performance tests as may be specified by the Division. [401 KAR 50:055 Section 2]
T-25	<p>G2. Permit Shield - A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with all:</p> <ul style="list-style-type: none">(a) Applicable requirements that are included and specifically identified in this permit; or(b) Non-applicable requirements expressly identified in this permit. [401 KAR 52:040 Section 11]

State-Origin Construction/Operating

Red River Hardwoods Inc

Facility Requirements

Activity ID No.: APE20040001

Page 7 of 13

COMB1 (001) Wood Waste Boiler w/ 13.4 mmBTU/hr-

Control Equipment: Bag House:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	SO2 (Sulfur Dioxide)	<p>The unit shall have emissions of SO2 (Sulfur Dioxide) ≤ 4.43 lb/mm Btu actual heat input.</p> <p>Compliance Demonstration:</p> <p>SO2 emissions (lbs/hour) = [(0.025 lb/mmBtu which is emission factor from AP-42) divided by (wood heating value in mmBtu/ton)*(tons of wood per hour on weekly average)].</p> <p>Limit Regulation. [401 KAR 59:015 Section 5(1)] This requirement is applicable during the following months: All Year. Statistical basis: Three-hour average.</p>
L-2	PT (Particulate Matter)	<p>The unit shall have emissions of PT (Particulate Matter) ≤ 0.52 lb/mm Btu actual heat input.</p> <p>Compliance Demonstration:</p> <p>PM emissions (lbs/hour) = [(0.4 lb/mmBtu which is emission factor from AP-42) divided by (wood heating value in mmBtu/ton)*(tons of wood per hour on weekly average)].</p> <p>Limit Regulation. [401 KAR 59:015 Section 4(1)] This requirement is applicable during the following months: All Year. Statistical basis: Three-hour average.</p>
L-3	Visible Emissions	<p>The unit shall have Visible Emissions ≤ 20 % opacity except for emissions occurring during cleaning of the firebox, blowing of soot and building of a new fire. For compliance with visible emissions limit, see monitoring. [401 KAR 59:015 Section 4(2)] This requirement is applicable during the following months: All Year. Statistical basis: Six-minute average.</p>
L-4	Visible Emissions	<p>While cleaning of the fire box or blowing of soot is being done, Visible Emissions ≤ 40 % opacity shall be permitted for not more than 6 consecutive minutes in any 60 consecutive minutes. [401 KAR 59:015 Section 4(2)] This requirement is applicable during the following months: All Year. Statistical basis: Six-minute average.</p>

State-Origin Construction/Operating

Red River Hardwoods Inc

Facility Requirements

Activity ID No.: APE20040001

Page 8 of 13

Narrative Requirements:

Applicable Regulations:

Condition No.	Condition
T-1	Applicable Regulations: New Indirect Heat Exchangers applies to new affected facilities less than 250 MM Btu/hr commenced on or after April 9, 1972. [401 KAR 59:015]
T-2	Applicable Regulations: 40 CFR Part 60 standards of performance for new stationary sources is applicable due to incorporation by reference of 40 CFR 60 Subpart Dc, Standards of performance for small industrial-commercial-institutional steam generating units. 40 CFR 60 Subpart Dc applies to each affected facility that commenced construction after June 9, 1989. [401 KAR 60:005 Section 3(e)]

Reports and Submittals:

Condition No.	Condition
T-3	Reports and Submittals: Permittee shall submit semi annual reports containing monthly reports of wood combusted and hours of operation. [401 KAR 52:040 Section 10]

Monitoring:

Condition No.	Condition
T-4	Monitoring: Permittee shall monitor and keep records of the amount of wood waste combusted on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: Permittee shall perform qualitative visual observation of the opacity emissions from the boiler stack on a weekly basis and maintain log of the observations. If visible emissions from the stack are seen, then opacity shall be determined by EPA reference method 9 and an inspection shall be initiated for any necessary repairs.

State-Origin Construction/Operating

Red River Hardwoods Inc

Facility Requirements

Activity ID No.: APE20040001

Page 9 of 13

EQPT1 (002) Mill working Equipment 14.3 tn/hr

Control Equipment: Bag House:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	PT (Particulate Matter)	<p>Each unit shall have a maximum emissions of PT (Particulate Matter) ≤ 18.68 lbs/hr. If the process weight rate for the unit is 1,000 lbs/hr or less, the limit on emissions of particulate matter is 2.34 lb/hr. If the process weight rate for the unit is above 1,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = $3.59 \times \text{process weight rate}^{0.62}$).</p> <p>Compliance Demonstration</p> <p>Compliance will be demonstrated from the following emission calculation basis and monitoring requirements: PT emission in pounds per hour = (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor of 9.1lb PT/ton)(1-control efficiency of 0.99).</p> <p>See Monitoring Requirements for monitoring rates and visual inspection controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.</p>
L-2	Visible Emissions	<p>Each unit shall have Visible Emissions $< 20\%$ opacity For compliance with visible emissions limit, see Testing and Monitoring Requirements. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.</p>

Narrative Requirements:

Applicable Regulations:

Condition No.	Condition
T-1	<p>Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and limits particulate emissions. [401 KAR 59:010]</p>

State-Origin Construction/Operating

Red River Hardwoods Inc

Facility Requirements

Activity ID No.: APE20040001

Page 10 of 13

Narrative Requirements:

Monitoring:

Condition No.	Condition
T-2	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-3	Monitoring: The permittee shall monitor the pressure drop across the baghouse on a daily basis.
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis.
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a weekly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs.

Recordkeeping Requirements:

Condition No.	Condition
T-6	Recordkeeping Requirements: The permittee shall maintain records of the following : 1) monthly hours of operation and material processing rate; 2) the weekly log of the qualitative visual observation of the opacity of emission from each stack and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceed the standard.

Performance Test:

Condition No.	Condition
T-7	Performance Test: The permittee shall determine the opacity of emission from each stack by EPA Reference Method 9 Quaterly, or more frequently if requested by the Division.

State-Origin Construction/Operating

Red River Hardwoods Inc

Facility Requirements

Activity ID No.: APE20040001

Page 11 of 13

EQPT2 (003) Chipper 6.42 tn/hr

Control Equipment: Bag House:

Narrative Requirements:

Condition

No.

Condition

T-1

This activity is insignificant and 401 KAR 59:010 is generally applicable. [401 KAR Chapter 52]

State-Origin Construction/Operating

Red River Hardwoods Inc

Facility Requirements

Activity ID No.: APE20040001

Page 12 of 13

EQPT3 (004) Trailer 4.82 tn/hr
Control Equipment: Bag House:

Narrative Requirements:

Condition

No.

Condition

T-1 This activity is insignificant and 401 KAR 59:010 is generally applicable. [401 KAR Chapter 52]

State-Origin Construction/Operating

Red River Hardwoods Inc

Facility Requirements

Activity ID No.: APE20040001

Page 13 of 13

EQPT4 (005) Gluing Process 2000 gal/hr:

Narrative Requirements:

Condition

No. Condition

T-1 This activity is insignificant and 401 KAR 63:020 is generally applicable. [401 KAR Chapter 52]